

#630

PIONEER VENUS 1

IONOPAUSE & BOWSHOCK DATA

78-051A-00F

PIONEER VENUS 1

IONOPAUSE, BOWSHOCK CROSS TIME, LOC

78-051A-00F

This data set has been restored. There was originally one 9-track, 1600 BPI tape written in ASCII. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on a 11/70 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005677	DS005677	D060517	1 - 2	12/05/78 - 11/19/81

REQ. AGENT
RSH

RAND NO.
V0234

ACQ. AGENT
WSC

78-051A-00F

PIONEER VENUS 1
IONOPAUSE & BOWSHOCK DATA

This data set consists of one tape which is 9 TRK, 1600 BPI, ASCII and contains 2 files of data. The tape was created on an DEC 11/70 computer. The first file of data is the IONOPAUSE inbound & outbound data, the second is the BOWSHOCK inbound & outbound. The formats for both of the files are the same. The D & C numbers with the time span are as follows:

<u>D#</u>	<u>C#</u>	<u>TIME SPAN</u>
D-60517	C-23690	12/05/78 ~ 11/19/81

December 7, 1983

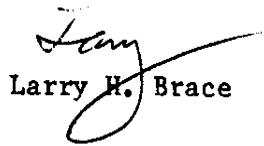
TO: Joe King/601

FROM: Larry H. Brace/961

SUBJECT: Submission of Tape and printout of Pioneer Venus Orbiter Electron Temperature Probe (OETP) data on bowshock and ionopause crossing locations

The attached printout and tape contain the PVO-OETP bowshock and ionopause files through orbit 1080. They give the inbound and outbound crossing times and positions of these features. Data gaps and orbital geometry do not allow the shock and ionopause to be observed on every orbit, but the files contain the crossings we have identified for the interval 78339 through 81323 (YR DAY). The tape is written in ASCII. The first file contains the ionopause data written exactly as it appears in the printout. The second file contains the bowshock data in the same format. The logical records are 120 characters in length grouped together in physical blocks of 1200 characters (bytes). The tape is terminated with two end of file marks. There are no label records or files on the tape.

Please contact me if you require further explanation of these data.


Larry H. Brace

78-051A-00F

These experimenter supplied IONOPAUSE & BOWSHOCK crossing times and locations data are on 9-track, 1600 BPI, ASCII magnetic tapes created on a DEC 11/70 computer. They were submitted by L. H. BRACE, the principle investigator on the Electron Temperature (Langmuir) Probe experiment.

From analysis of his Langmuir Probe data these crossings were identified with spacecraft telemetry data. There are 2 ,(two), files of logical records of 120 characters in length, grouped together in blocks of 1200 bytes. The crossings are identified from 1978, day 329 through 1981 day 323. The first file contains the IONOPAUSE inbound and outbound crossings data which include orbit numbers, date (year and day of year), time (hours, minutes, seconds), latitude (above and below the equator of Venus), altitude (above average surface of Venus of 6051 radius), local solar time (hours and tenths measured from anti-solar direction to point of measurement in Venus equatorial plane), and solar zenith angle (measured from the sun to point of measure). The second file contains the BOWSHOCK inbound and outbound crossings data in the same format. The data are for orbits through 1080.

ORBIT	DATE	PERIODICITY	HHR:MMSS	OUTBOUND CROSSING				SECS	HH:MM:SS	LAT	EST	ALT	SZA	IONPAUSE	
				HRS	MINS	SECS	LAT								
1	78339	15:11:12	54469	15:	14:49	39:7	15:6	601.	63:4	15:14:44	1:5	16:4	522.	66:2	
2	78340	14:21:42	51276	14:	14:36	52:1	15:2	832.	66:4	14:28:50	-15:8	16:8	834.	72:9	
3	78341	14:31:36	51971	14:	26:11	45:9	15:6	579.	66:2	14:38:10	-13:0	16:9	687.	73:7	
4	78342	14:40:12	52272	14:	31:12	59:6	14:9	1116.	69:5	14:47:51	-18:7	17:1	867.	77:1	
5	78343	14:46:14	52897	0:	0:0	0:0	0:0	0:0	0:0	54021	15:0:21	-35:3	17:6	84:6	
7	78345	15:4:19	53897	14:	58:17	67:4	16:6	592.	71:9	14:46:27	-13:0	17:3	645.	79:6	
8	78346	15:11:51	54367	15:	5:7	51:0	15:9	714.	71:9	15:20:4	-21:1	17:6	956.	83:8	
9	78347	15:19:28	54912	15:	15:12	39:9	16:5	386.	74:1	15:25:30	-12:3	17:5	600.	82:2	
10	78348	15:28:58	55333	15:	22:13	51:1	16:1	798.	74:0	15:35:57	-16:0	17:7	742.	85:3	
11	78349	15:38:23	56025	15:	33:45	41:8	16:6	423.	75:5	15:43:12	-6:0	17:6	441.	84:3	
12	78350	15:47:36	56335	15:	38:55	58:7	15:9	1032.	75:6	15:54:50	-17:1	17:9	778.	88:7	
13	78351	15:56:41	57998	15:	51:38	43:7	16:7	469.	77:7	15:25:53	-12:5	18:0	621.	89:1	
14	78352	16:5:40	57567	15:	59:27	46:9	16:6	623.	78:2	15:12:13	-14:1	18:1	672.	91:0	
16	78354	16:23:22	58526	16:	15:26	56:0	16:5	896.	79:1	15:32:12	-23:6	18:5	1052.	96:3	
17	78355	16:34:56	59684	16:	33:44	46:7	17:2	549.	83:1	16:04:45	-23:5	18:6	1044.	97:6	
18	78356	16:46:46	59959	16:	39:48	59:8	16:5	1080.	81:2	16:48:45	-21:7	18:7	959.	98:7	
19	78357	16:58:46	60552	16:	49:12	55:0	17:0	873.	83:1	16:58:2	-25:4	18:9	1137.	100:9	
20	78358	16:57:31	61042	16:	56:42	57:0	16:9	957.	83:5	16:62:25	-26:0	19:0	1162.	102:4	
21	78359	17:5:12	61789	17:	5:27	52:0	17:4	729.	86:1	16:07:39	-26:1	19:1	1170.	103:8	
22	78360	17:13:23	62123	17:	15:23	46:7	17:6	611.	88:3	17:21:11	-19:5	19:1	869.	104:3	
23	78361	17:21:31	62562	17:	21:42	56:0	17:4	893.	86:9	17:29:37	-20:7	19:2	921.	106:0	
24	78362	17:29:37	63066	17:	31:0	51:0	17:7	690.	89:6	17:38:52	-25:3	19:4	1133.	108:0	
25	78363	17:37:43	63566	17:	31:0	51:0	17:7	690.	89:6	17:42:32	-6:2	19:2	444.	106:9	
26	78364	17:45:43	63555	17:	36:35	60:3	17:3	1109.	86:9	17:54:8	-22:1	19:6	985.	110:6	
27	78365	17:53:36	63945	17:	45:25	57:2	17:6	953.	89:1	18:00:05	-27:2	19:8	1233.	112:3	
28	78366	18:1:37	64358	17:	53:3	58:1	17:6	996.	89:6	18:51:51	-3:1	19:4	377.	111:1	
30	78368	18:17:24	65228	18:	7:8	64:1	17:3	1330.	88:2	18:65:42	-25:7	20:1	1136.	116:4	
31	78369	18:22:26	65626	18:	6:3	6:0	0:0	0:0	0:0	18:66:02	-22:7	20:1	1009.	117:9	
32	78370	18:27:21	65790	18:	16:36	65:8	17:3	1461.	88:6	18:72:22	-38:3	20:6	1938.	117:8	
33	78371	18:32:15	66216	0:	0:0	0:0	0:0	0:0	0:0	18:72:75	-24:3	20:4	1087.	120:7	
34	78372	18:37:9	66215	18:	2:35	71:9	16:2	2073.	85:0	18:74:41	-34:6	20:8	1681.	120:7	
35	78373	18:42:2	66659	18:	34:19	55:1	18:6	863.	97:6	18:85:49	-40:6	21:0	2122.	120:4	
36	78374	18:46:54	66896	18:	34:56	68:0	17:3	1711.	89:0	18:47:6	-42:6	21:2	2261.	120:8	
37	78375	18:51:47	67030	0:	0:0	0:0	0:0	0:0	0:0	18:86:54	19:41:14	-36:4	21:1	1815.	123:7
38	78376	18:56:33	67732	18:	48:52	55:0	18:9	853.	100:4	18:88:12	19:6:52	-29:2	21:1	1344.	126:7
39	78377	19:0:55	68175	18:	56:15	42:0	19:6	424.	110:0	19:14:32	-40:1	21:5	2081.	124:4	
41	78378	19:9:34	68451	19:	0:51	58:7	19:0	1042.	100:4	19:65:50	-32:5	21:5	1551.	129:3	
42	78379	19:13:53	69090	19:	11:30	30:8	20:3	236.	120:5	19:18:52	-6:6	21:0	468.	134:3	
43	78380	19:16:12	69263	19:	14:43	36:3	20:2	320.	118:4	19:15:17	-31:8	21:7	1515.	131:7	
44	78381	19:22:23	69432	19:	13:52	58:0	19:3	995.	103:3	19:31:42	-25:5	21:6	1145.	135:1	
45	78382	19:25:56	69562	0:	0:0	0:0	0:0	0:0	0:0	19:02:28	19:43:48	-51:1	22:6	3134.	122:6
46	78383	19:29:26	69716	19:	21:56	54:2	19:8	831.	108:2	19:40:54	-33:1	22:0	1584.	134:2	
48	78384	19:31:51	70311	19:	31:51	41:6	20:0	433.	120:3	19:04:0	-17:9	21:9	828.	142:4	
49	78385	19:40:2	70241	19:	30:41	60:7	19:6	1167.	104:8	19:48:45	-23:0	22:1	1046.	141:9	
50	78386	19:43:34	70946	19:	42:29	24:8	21:3	192.	135:1	19:53:29	-27:5	22:3	1280.	140:9	